ATARI COMPUTER ENTHUSIASTS [N.S.W.]

A.C.E. (N.S.W.)
G.P.O. BOX 4514,
SYDNEY. 2001.
N.S.W. AUSTRALIA.

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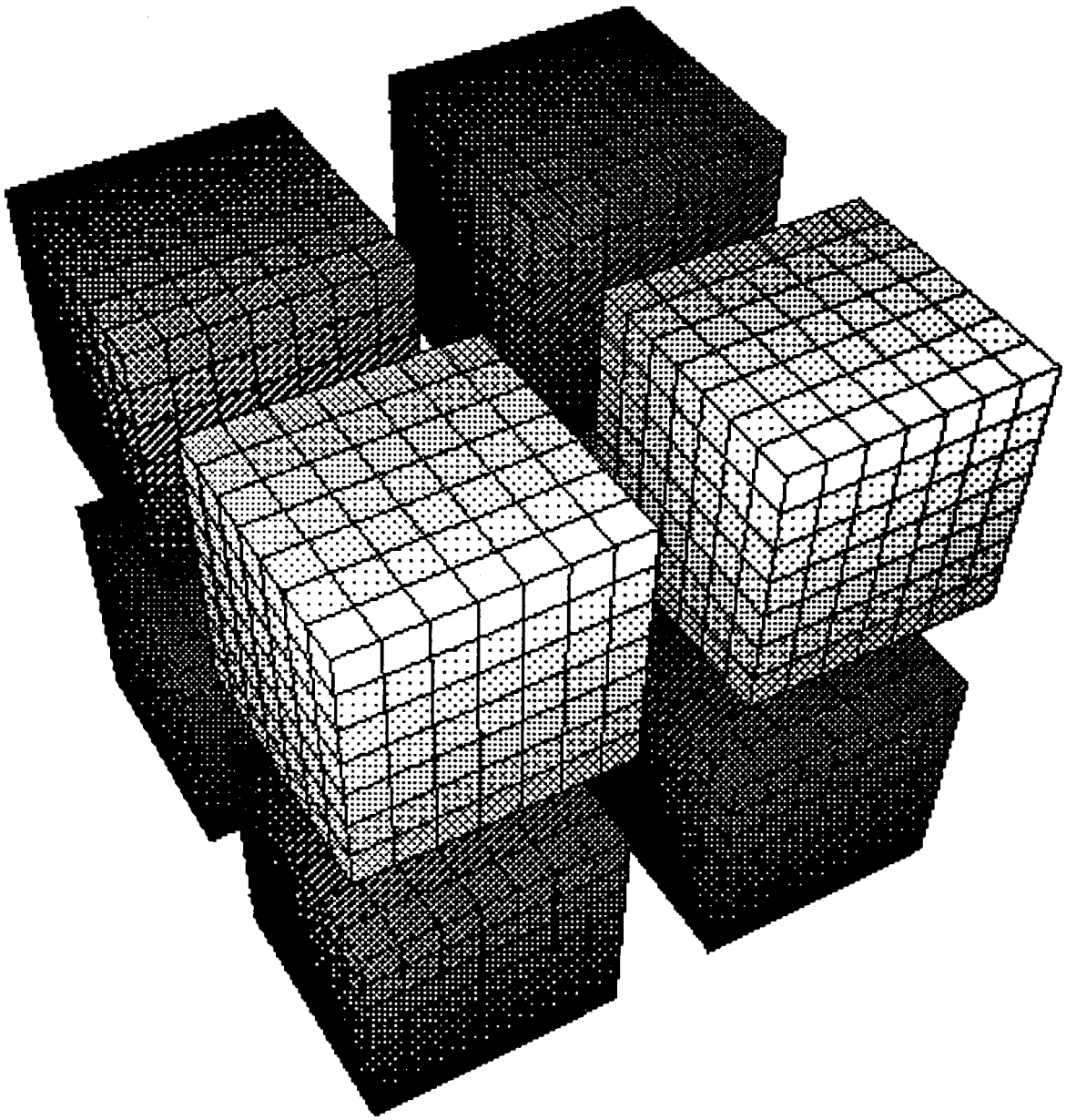

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Atari Computer Enthusiasts (N.S.W.) is an independent, non-profit computer users' group loosely affiliated with Atari Computer Enthusiasts in the U.S.A. While we are recognized by Futuretronics Australia Pty Ltd as the Official Atari Users' Group in N.S.W., we have no connections with them or ATARI, Inc. Our aims include promotion of the various ATARI Home Computer Systems, instructing both beginners and advanced users in programming techniques, exchanging public domain software, hints, tips and ideas amongst members and generally enjoying ourselves. The Club cannot condone software piracy.

COMMITTEE MEMBERS	Home Phone #
Barry Williams (President)	(02)452 2229
Alex Kwok (Secretary/Treasurer)	(02)661 3377
Peter Bamford (Meetings Organizer)	(043)42 2655
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Address all mail to the relevent committee position:-
C/- Atari Computer Enthusiasts (N.S.W.)
G.P.O. Box 4514,
Sydney. N.S.W. 2001.

MEMBERSHIP FEES

$30 for the first year and $15 thereafter (or $20 and $10 respectively for students under 18 and still at school). Overseas air-mail subscriptions are $10(Aust) extra per year. Please write to the Secretary for further details.

SOFTWARE EXCHANGE

Titles available are:-
*EDUCATION #1 *GAMES #1 *GAMES #2
*UTILITIES #1 *UTILITIES #2 *fig-FORTH (disk only)
*INSIDE INFO Vol. 1 *XL TRANSLATOR (disk only)
*INSIDE INFO Vol. 2 with CARTOONS
*INSIDE INFO Vol. 3 (issues 11-14)

DISKS: $10 each. CASSETTES: $8 each.

Non-members add 10%. Include an extra $1.50 to cover surface postage within Australia. Contact appropriate software exchange for further details.
Overseas members should write for costs first.

For every program you write and have accepted by the Software Exchange (or articles printed in INSIDE INFO), you will be entitled to one Software Exchange disk or tape at half price. We are keen to exchange software with other user's groups.

BLANK MEDIA: Prices are for lots of 10 and may change without notice. An extra $1.50 should be included to cover postage within Australia. Contact appropriate Software exchange for details.
DISKS: $27 (Nashua -in plastic box) CASSETTES: $9
DISK BOXES: $25 -hold 90 disks with lockable lid. Non-members price is $30. Add $3.35 for postage within N.S.W. and $5.50 elsewhere within Australia. Contact club Secretary for details.

REFERENCE LIBRARY

Some books are brought to meetings, others are available only by arrangement with the librarian. Loans are made only to people researching articles or talks for the club.

S.I.G.s -SPECIAL INTEREST GROUPS

Home phone numbers of contacts are given below. Phone them or write to the Editor with your suggestions, high scores, reviews, hints or tips.

GROUP	CONTACT	Home Phone #
ACTION!:	Ken Scalley	(02)624 4561
ADVENTURES:	Garry Francis	(02)789 1397
ARCADE GAMES:	Ken Shiu	(02)534 2120
FORTH:	John Mattes	(02) 94 5463
HARDWARE:	Jamie Athas	(02)349 7365
MAGAZINE PROGRAMS:	Garry Francis	(02)789 1397

BULLETIN BOARD -Phone(02)327 4898

Systems Operator (SYSOP) is Roberto Romano. System available between 8.30 P.M. and 9.30 P.M. Tuesday to Saturday only. Access requires a personal password which is available from SYSOP for $3 per year. We recommend you use "AMPLUS3.UDL" terminal software. PUBLIC DOMAIN SOFTWARE ONLY!

INSIDE INFO

Our bi-monthly users' group magazine. Articles, etc. should reach the editor as early as possible and at least ONE MONTH ahead of the release date.
BACK ISSUES: $2.50 each for issues in stock. $4 each if out of stock. Mailing costs are extra.
EXCHANGE SUBSCRIPTIONS: We are keen to exchange magazines with other Atari Users' Groups. Please write to the Secretary for details.
COPYRIGHT: Unless otherwise stated, articles in INSIDE INFO are not copyrighted. However, if any article is reprinted, acknowledgement of our source should be made. Also, please send TWO copies of the issue of your magazine to A.C.E. (N.S.W.).
ADVERTISING: Full page $50, Half page $30, Quarter page $20. Contact the President for further information. Members' personal adds are free.

MEMBER'S DISCOUNTS

You may be asked to present your membership card before being given any discounts!
COMPUTERWAVE [5% -cash only] 325 George St, Sydney. (near Wynyard) Ph. (02) 29 1631.
THE COMPUTER SPOT [5% credit, 10% cash] Shop C4, M.L.C. Centre, Martin Place. Ph.(02)235 2971.
COVER CARE [25% off computer dust covers] P.O. Box 719, Chatswood, N.S.W. 2067. Ph.(02)498 5631.

MEETING DETAILS

Meetings are held at 6.15 P.M. on the first Monday of the month or the second Monday if it clashes with a public (or Bank) holiday in the Amenities Room, 7th Floor, OTC House, 32-36 Martin Place, Sydney.
NOTE: You can't enter the building after 6.30 P.M. and you MUST sign in!

MEETING DATES FOR 1984

*8th October	5th November	*3rd December.

MEETING DATES FOR 1985

*4th February	4th March	*1st April
6th May	*3rd June	1st July
*12th August	2nd September	*14th October
4th November	*2nd December	

* indicates release dates for INSIDE INFO.

From The President

Well, by the time you read this I will have taken up my new position as "International Correspondent" for A.C.E. (N.S.W.), this is not quite correct however -I have accepted a 7 month assignment in the U.S.A. with my employer.

So it's with regret that I tender my resignation as President of A.C.E. (N.S.W.) and hand over my responsibilities to Barry Williams (Vice-President). I am sure Barry can look forward to the same support I've received from the Committee over the past 18 months.

I hope to purchase an ATARI in the States and will look forward to Inside Info keeping me in touch with Australia. My thanks to all those who have supported me over the past 18 months. I wish the new Committee success in 1985.

TONY REEVE.

Notices

From the Secretary

You will notice in the upper right hand corner of your mailing label a number. This number indicates the issue at which your current INSIDE INFO subscription will end -unless you re-subscribe before the mailing of the following issue.

If the number on your mailing label corresponds to the number of the issue you receive (in this case 15), I suggest that you make use of the enclosed renewal form within the month. The Club's mailing list is updated as renewals are received -getting your renewal in early will ensure that you won't miss out on any issues of INSIDE INFO.

A couple of members asked why they should renew before their membership expires. Suppose a member joined the club in September -he'll receive a membership card and the August '84 INSIDE INFO. By next June he will have received his entitlement of 6 issues even though his membership card indicates currency to September '85.

Atari prices drop

Following the takeover of ATARI by Jack Tramiel, Futuretronics have announced the following Recommended Retail Prices:-

ITEM	FORMERLY	RRP(now)
800XL computer	$599	$399
600XL computer	$399	$299
1050 disk drive	$699	$499
1010 recorder	$159	$ 99
1020 printer	$399	$159
1027 printer	$529	$499
CX77 touchtablet	$139	$ 99
Pacman	$ 79.95	$ 39.95
Atariwriter	$129	$ 99.95
Visicalc (!!)	$295	$ 99.95
Synfile	-	$ 99.95
Syntrend	-	$ 99.95
Syncalc	-	$ 99.95

(Would you believe that Visicalc at one stage was retailing for over $400 ?!)

So far, two members have answered Chris's cry for help. Our thanks to John Tunkunas and Paul Sweeney.

Alex Kwok.

[EDITOR'S NOTE:- About three other members offered their help at the September meeting -I've really been stunned by the amount of support that I've been receiving and the enthusiasm that some of our members have been showing lately. THANKS!]

NOTICE OF ANNUAL GENERAL MEETING

An election of committee members will be held at the AGM on Monday the 5th of November, 1984. Chris Fitzgerald (Editor), Peter Bamford (Meetings Organizer) and Brian Simmons (Disk S/W Exchange) will definitely not be standing for re-nomination, but ALL positions will be declared vacant!

As a further incentive to encourage members to attend the AGM, we will be raffling the program (disk) "Agent U.S.A.".

Voting for the best article to appear in INSIDE INFO (Issues 7 to 12) will also take place at the AGM. Ensure you know how you want to vote by then -a list of all the articles appears in this issue of INSIDE INFO. The prize is $100 to use as you wish.

New starting time for meetings

It has been decided to start all future meetings at 6.15 PM (15 minutes later). This will allow everyone more time to settle down and to get things organized.

New Special Interest Group

With the growing interest in the new programming language "ACTION!", Ken Scalley has decided to start a S.I.G. to help anyone who's interested. You can contact Ken on (02)624-4561.

Magazine S.I.G

Barry Williams has taken over the job of President and has therefore handed over the Compute! S.I.G. to Garry Francis. Since Garry has been compiling collections of ALL magazine software for the Club, the S.I.G. has been renamed the "Magazine S.I.G.". If you can supply Garry with any programs you have typed in, you should contact him on (02)789-1397. Garry also looks after the Adventure S.I.G.

New supply of blank disks available

Five hundred Nashua single sided, double density disks have been ordered and should be available by the time you read these notices. To pass on more benefits to our members, the price has been reduced from $32 to $27. The disks come in tough plastic boxes in lots of ten.

Disk storage boxe price reduction

Rather than have "dead" money laying around, the committee has decided to sell the supply of disk storage boxes at a loss. These boxes hold 90 disks and have a lockable lid. Refer to the Information Sheet (page 2) for prices.

Alternative Printer Interfacing

by Lynn Clock and Phil Fitzjarrell.
Reprinted from Eugene ACE Newsletter (April, 1984)

So, you are thinking about getting a printer for your Atari. You have even convinced your wife/husband/mother/father to let you buy one when you discover that Atari charges around $US200 ($350 here in Australia) for the privilege of connecting it to their computer. Never fear, alternatives are here! In the three years we have each had an Atari we have owned or used four different printer interfaces. We hope our experiences can help you become aware of some of the advantages and disadvantages of these magic boxes.

Axiom AT-846

This direct connect parallel printer interface is cheaper ($US100) than the Atari 850. It will support only parallel printers. It connects into the serial bus and has an expansion port so you can put it anywhere in your serial device chain. The cable to the printer is 19 inches (480mm) long with a Centronics plug. The I/O cable is 29 inches (735mm) and the "unit" is 5.5x3.5x1 inches (140x90x25mm). Although not always needed, an external power supply is provided with a 70 inch (1780mm) line. If your printer provides 250 milliamps of 5 volt power on pin 18 of the Centronics plug you can switch the unit to run on this power and not use the power adaptor. The Axiom provides the capability to make four other modifications to the unit. These allow the unit to support a wider range of printer types and user preferences. The Axiom does pass all eight bits to the printer, so if your dot matrix printer will support dot graphics, the Axiom will too. We have run a wide variety of software using the Axiom and it has worked perfectly. The Axiom is well engineered and an excellent product.

APE-FACE

We cannot say the same for the APE-FACE. This interface has no expansion port, so must be the last peripheral in your I/O chain (like the 410 recorder). This is not convenient for us and may not be for you.

The APE-FACE supports parallel printers and has a Centronics plug. The I/O cable is about 36 inches (915mm) and the printer cable 19 inches (480mm). It draws power from the Atari which is OK, but the Atari is not designed to support this extra load. You may run into a power supply problem and we think we have already seen one.

A far more serious problem is that the APE-FACE is not 100% compatible with all available software. We could not get APE-FACE to function with B/GRAPH by Inhome Software, SUSPENDED by Infocom or GRAPHIC MASTER by Datasoft. It did work with all our BASIC programs and passed all eight bits. You can get the APE-FACE for around $US60, but remember, you get what you pay for.

[EDITOR'S NOTE:- David Deans of Charlestown N.S.W. writes:- "Recently I decided the time was right to add a printer to my computer system, and as Atari didn't have a suitable dot-matrix printer available, I decided upon the Star Gemini 10X. The Atari 850 interface was out of the question because of the expense, so I eventually decided upon the "APE-FACE" from the U.S.

The combination works beautifully with Atari-Writer and I would highly recommend it. Any members interested in inspecting it or with any questions regarding the set-up are most welcome." You can contact David on (049) 43-7229.

Digital Devices, who manufacture the APE-FACE now have four models of the APE-FACE, all of which are guaranteed for 12 months.

XLP: ($US89.95) for Atari 400/800 and 600XL/800XL.
12XLP: ($US89.95) for Atari 1200XL.
XLPS: ($US99.95) same as XLP model but with extra serial I/O port for daisychaining.
12XLPS: ($US99.95) same as XLPS model but with extra serial I/O port for daisychaining.

The letter they sent us with their add (on the back page!) stated:-
"The APE-FACE is 100% compatible with all software, including graphics." They also manufacture two serial I/O junction box cables called the ATR-LINK. These cables are about 6 feet (1830mm) long, having one male connector and two or three female serial ports -these are $US39.95 and $US48.00 respectively. They also mentioned that they have a graphics screen dump program called "Humpty Dump" for $US34.95.

Concerning the mentioned power supply problems for these interfaces. A look at the Atari 400/800 Operating System Users' Manual revealed that the serial port actually has two pins dedicated to supplying power for Atari peripherals -one is +5 volt at 50 milliamps, the other is +12 volts with unknown current rating. I don't know if the same applies for the XL machines.]

MPP-1100

An innovative product is the Microbits Peripheral Products MPP-1100 ($US100). This unit plugs into joystick port #3, so it won't work on the XL computers. It comes with a chip you must install on your operating system board. Although this sounds terrifying to some, it is an easy and well documented procedure.

The purpose of this chip is to allocate joystick port #3 to the printer device inside the Atari, but MPP doesn't stop there. They improved one feature in the operating system and a bug in the other. The MPP-1100 allows LPRINTs in FOR-NEXT loops in the dot graphics mode.

A 48 inch (1220mm) cable to the Atari is provided along with a 12 inch (305mm) cable (Centronics plug) to the printer. Our biggest complaint is that the Centronics plug fails to lock onto the Epson connector.

Although it is powered from the computer, we never noticed any power supply problems. The MPP-1100 is a great product if you have joystick port

#3 and don't use it.

[NOTE from the Eugene ACE Editor:- While the MPP-1100 is still on the market, MPP now manufactures only the MPP-1150. It's also $US100 and needs neither a joystick port nor a printer handler. It's a greatly improved product and a printer buffer is easily added with a memory chip.]

We have seen at least three articles in various publications showing how to make a "home-brew" interface. It uses two joystick ports and works just fine, BUT you must load in a driver routine to make it work. This severely limits the uses for this type of interface. Cable lengths are variable and costs are minimal. See ANALOG Magazine #16 for details.

There are many interfaces on the market and we hope this article will help you select the right one for you. Be alert for interfaces which only pass seven bits (not dot graphics) and interfaces which only work in specific modes.

[EDITOR'S NOTE:- Remember that any external power supplies from the States will not be suitable for our Australian power supply. None of these interfaces have an RS-232 port and therefore can't be used to operate a modem. All prices quoted are in U.S. dollars and are the recommended retail prices.

Another parallel interface is available as part of an Australian product called SUPERMON. A review of this piece of hardware has been printed in this issue of Inside Info.] ●●●

Tape Tips

TAPE TIP

From the Western New York Atari Users' Group Newsletter "POKEY" (May, 1984) comes the following tip (which I would have found to be very handy about two months ago).

Usually most problems come when your friends give you tapes. Even if they're nice enough to note the tape counts for you, you should know that the tape counts can differ between 410s as much as 10 counts for every 100. The tape count between a 410 and a 1010 can differ as much as 20 counts in every 100!

The whole trick to LOADing a program is finding where it starts. If you don't get it right on the money you'll get a bad LOAD. Play the tape through a regular audio tape player. If you don't have one handy POKE 54018,52 then <RETURN>, press play on the 410 and turn the TV volume up real loud.

NOTE: This does not work with the 1010s, I've tried. You'll have to find an audio player if you're having trouble LOADing tapes.

You'll hear one of three things:-

1) What sounds like bursts of static with short pauses of silence between them. This means that you're somewhere in the middle of a program.

2) Nothing. Either you're between programs or there's nothing recorded on the tape. Let it go for about 10-15 counts. If you don't hear the third sound (mentioned below) then assume there's nothing there. Try rewinding the tape a bit. If you're using your computer and TV to listen to the tape, try a regular audio recorder before giving up.

3) The third sound you could hear is a high pitched whine or whistling sound. Bingo! -this is what you're looking for. This is the sound that lets the computer prepare to receive the information from the tape. Rewind the tape until you can find the start of this sound and press the PAUSE button. Then gently press STOP without jerking the tape too much.

With the tape in this position you should have no trouble LOADing the program. If you've already had a bad LOAD type LPRINT <RETURN> or turn the computer off to clear the cassette buffer.

1010 PROBLEMS

An article in the Melbourne ACE newsletter mentioned that there is a problem with newer Atari 1010 program recorders. Apparently the early model 1010s were better than the new ones because they used resistors with tolerances of plus or minus 5%. Later 1010s were constructed using resistors with tolerances of plus or minus 10% which isn't good enough for reliable performance.

If your new 1010 is giving you trouble you can contact Futuretronics and give them the serial number of your unit. This will allow them to identify whether or not you have one of the problem program recorders. No mention was made of the action (if any) that would be undertaken by Futuretronics to rectify the problem.

ATARI COMPUTER ENHANCER

The November 1983 issue of the Michigan ACE newsletter had an article by England's "PAGE 6" magazine editor, Les Ellingham. The article mentioned a utility called "The Atari Cassette Enhancer which allows programs to be verified on tape without losing the original program in memory. It also names the programs in a similar fashion to files on disk which means that there is no need to know where the program is on tape -it can search a tape and RUN the program you want. This is a system which is used on several other makes of personal computer and may be of interest to some of our members who converted to the Atari.

Apparently there's a lot of other stuff included too but the article didn't mention where to buy the program from. I'll try to find out and let you know in a future issue of Inside Info.

PROGRAM REVIEW

AGENT U.S.A. from Scholastic Wizware.
Reviewed by Gordon Reeve. (Frenchs Forrest, N.S.W.)

You are the top investigator for the U.S.A's most elite intelligence organization. You have been assigned to some of the country's toughest and most dangerous missions before but this one will be your toughest mission ever.

You are 'AGENT U.S.A.' your assignment is to find and stop the evil 'Fuzzbomb' from turning every man, woman and child into helpless fuzzbodies. You have been chosen for this mission because the government knows you don't rectify problems you eliminate them and that's what you must do to the fuzzbomb -terminate it. You must use quick reflexes and your initiative or you too will end up as a helpless fuzzbody.

This piece of software is actually a cleverly disguised geography and mapping lesson of the U.S.A. The object of the game is to use the extensive train network to travel the U.S.A., seeking out the infamous fuzzbomb.

At the beginning of the game you (Agent U.S.A) are placed in a randomly selected, city train station. There are maps and information concerning the fuzzmenace at every train station of all state capitols. Using this information you must look up train timetables, catch trains and track down the fuzz-bomb.

I can highly recommend this game for all ages -I only wish there were more like it. It has good graphics, a very catchy musical theme, is educational, challenging, lots of fun and holds your interest throughout the whole game.

[EDITOR'S NOTE:- I would like to thank Scholastic Wizware in the States for sending us this program for review. No price was supplied with the review disk but AGENT U.S.A. is available in Australia through Ashtron Software (Ashton Scholastic) for $52.95. The review copy of AGENT U.S.A. will be raffled off at the November meeting of A.C.E. (N.S.W.)]

Atari Gets Tough With Counteiters

(Futuretronics Press Release dated 7th June, 1984)

Leading computer manufacturer, Atari International Hong Kong Ltd (AIHKL), has declared war on counterfeiters and has already obtained a large number of convictions throughout the Asia Pacific region.

Mr W. Thomas Bayha, Managing Director of AIHKL, said that "although imitation remains the sincerest form of flattery, we are determined to put a stop to counterfeiting, illegal copying and passing-off of copied Atari products whenever we encounter such practices."

"Since the autumn of 1983, Atari International has prosecuted more than a dozen people in Hong Kong for illegally copying our products or possessing counterfeit products," he said. Every one of the defendants was found guilty, and additional cases are pending," he added.

"In Taiwan, three companies engaged in manufacturing or distributing copied Atari software have been raided this year. In each case, both civil and criminal action have been initiated, and Atari is confident that the copyists involved will be prosecuted to the full extent of the law."

Our anti-counterfeit actions are co-ordinated on a regional basis," said Mr Bayha. "We have recently obtained injunctions against seven purveyors of copied Atari goods in Singapore, and at this time we are actively pursuing an investigation of similar illegal practices in Australia as well. Although the laws protecting inventions and trademarks vary greatly throughout the Asia/Pacific region, we are not deterred by the complexity of the problem."

Mr Bayha pointed out that the maximum penalty in Hong Kong for possession of counterfeit products is five years imprisonment and a fine of HK$500,000 in the district court, and two years imprisonment and a HK$200,000 fine in the Magistrates Court.

"We will not rest until these deterrent penalties have been forced as effectively as in Taiwan, where counterfeiting activities have been substantially reduced due to business, court and Government pressure," he said.

The Hong Kong branch of the American owned multinational corporation is fighting a continual battle to protect its copyrights against imitators and counterfeiters, and the organisation has been involved in extensive litigation internationally.

"We will continue to prosecute in any case of our rights being infringed anywhere in the region in order to reaffirm Atari's exclusive right to manufacture and market the video games with which the Company initially made its reputation," he said.

"A great deal of time, money and effort have been poured into the creation of this business and we do not intend to allow counterfeiters or copyists to benefit from the pioneering work that Atari has done in the field of video games and computer technology."

Mr Bayha added that it was a simple matter for dealers to avoid the risk of mistaking counterfeit cartridges for genuine Atari products by checking the distributor's authorisation with Atari International (HK) Ltd., or in Australia with Futuretronics Australia Pty Ltd, the Australian Atari distributors.

SuperMon

Reviewed by Chris Fitzgerald. (Clyde, N.S.W.)

INSTALLATION

SuperMon is easily fitted to the 800. Remove the OS board and the RAM board next to it. On the OS board, carefully remove two of the chips. Plug the one SuperMon board into the correct OS board socket (the notches on the chips to the top), then solder ONE wire to the solder side of the OS board. Replace the ROM and RAM boards (minus the plastic covers)!

FEATURES

Revision B ROM This ROM has never been made available in Australia -possibly because of the way the GRAPHICS modes need to be displayed on the PAL TV system. SuperMon gives you this Revised Operating System which means that you no longer have the problem of the disk drive "going to sleep", but the main advantage is with the printer. This used to "go to sleep" and when it "woke up" it would repeat the buffer, ruining a page of printed text. In one issue of Inside Info (usually 18 pages long) I had 26 pages ruined through this and lost a lot of time double checking every printed page -but no more!

Fast key repeat The initial delay before a repeat has been brought back to 1/3rd with the subsequent interval being halved -this makes screen editing a breeze. Because SuperMon is actually a new O.S., these two features are available at ANY time regardless of the program being run -so AtariWriter is better to use now too! Other SuperMon features:-

1) It uses absolutely NO extra memory.

2) It adds GRAPHICS modes 12, 13, 14 and 15 on the 400/800 computers as well as split screen modes in all graphics modes.

3) If error 143 (bad recording or read back from cassette or disk) occurs, SuperMon will ignore it. This may cause an imperfect program LOAD but is better than no program LOAD at all.

4) Conversion of hexadecimal numbers to decimal and vice versa on any GRAPHICS 0 screen.

5) Monitor option "Q" allows you to restore and LIST most unLISTable BASIC programs.

6) An inbuilt printer interface which could eliminate your need for an expensive 850 interface. Accessed from the monitor this option ("P") diverts the normal printer handler through the joystick ports. On the 400/800 SuperMon outputs through joystick ports 2, 3 and 4 and allows for full 8 bit parallel transfer, with strobe and busy -suitable for almost any centronics printer. The XL version uses both XL joystick ports, allowing ASCII transfer with 7 bits -unfortunately this interface may not be as reliable as the one in the 400/800 version of SuperMon.

THE MONITOR

Although all the following options are available through the SuperMon monitor they have remained closed to me since I know nothing at all about machine language. Find will locate any length hex. string, using one or more wildcards and can include a 4k "block" wildcard. Move, Verify, Change, Ascii dump to screen, List disassemble (mnemonic format), Step and Trace with optional following of subroutines, Run at address, Go to cartridge.

SuperMon also has the following disk access options but requires extreme caution -otherwise you may damage a program on disk. Boot disk, DOS menu, Index of disk files, Find is similar to above but searches the disk, Write memory to disk in consecutive sectors, Read from previously written disk direct into memory, Special DOS to read any standard DOS file into memory.

SOFTWARE COMPATIBILITY

Apart from the problems mentioned below, SuperMon is compatible with virtually all Atari software except for a few programs which used illegal entry points and won't operate with any Revision B ROM. A switch is included with SuperMon which will allow you to switch SuperMon out for any software which checks for the presence of a monitor.

For the XL machines there is a different version of SuperMon which allows you to switch between the XL and 400/800 Operating Systems. This eliminates the need for translator disks -especially handy if you only use a program recorder.

PROBLEMS

*The version I received has a conflict with AtariWriter in that the cartridge won't initialise correctly -new versions are OK. If you have this problem follow this procedure:-

Switch SuperMons switch to the monitor, BOOT the system with AtariWriter plugged in and press the OPTION key, in the monitor (use option "R") run at address "BF37", run at "CFF0", then run at "F1FC".

*SuperMon uses the following keystrokes:-

SHIFT-CTRL M monitor [9].
SHIFT-CTRL H hex-decimal [8].
SHIFT-CTRL D decimal-hex [0].

Because these keystrokes conflict with "ACTION!" and a screen dump program called PRINTWIZ, I am about to have my SuperMon "customized" to the keys shown bracketed (8-0). If you like, you can specify these keys when ordering at no extra cost. Failing this customization, you must switch out SuperMon while using these programs to make use of these keys -but this means you can only have GRAPHICS 0, no other Graphics modes are possible. This is never a problem with machine language programs since these don't make GRAPHICS calls.

WHERE TO GET IT

A.C.E. members can get SuperMon at the discount prices of $79 for the 400/800 version and $85 for the XL version. Upgrades are available if you return your original SuperMon and $10 to cover labour and postage. Write to:-

SUPERMON, P.O. Box 507, BEENLEIGH. 4207. Qld.

SuperMon is very similar to an American monitor called OMNIMON which is not suitable for the Australian PAL TV system. Omnimon however, was written by Will Visser in Queensland and is therefore written to suit our versions of the Ataris.

You may think that my limited use of SuperMon doesn't warrant the money outlayed, but I tell you, it's one of the best investments I've made for my Atari and I don't think I could handle it if I had to go back to the old operating system.

BOOK REVIEW

GETTING STARTED with the ATARI 600XL.
Released by A.N.Z. for Phoenix Publishing.
Reviewed by Barry Williams. (Frenchs Forrest, N.S.W.)

Aimed at first time users, this book takes you from starting on the keyboard and guides you step by step until you become sufficiently expert to write your own programs.

This 'essential' book will help you use Atari Basic, understand graphics design programs and file data on cassette.

Example programs are shown in the book along with chapters on how to use sound and colour -notice the spelling, yes the book is English so you should have no fears about its content.

It has a ready reference of 'BASIC' commands as well as an index of 'ERROR' numbers. It's a mini bible of information.

140 pages for $19.50, the book was written by PETER GOODE.

FOR SALE

*****

Atari 400 computer -48k & full stroke keyboard $200
Atari 810 disk drive.....$300
Atari 850 interface.....$100
Atari 410 cassette recorder..$50
Microline 80 printer.....$200
CARTRIDGES: Atari BASIC $50, Space Invaders $15, Galaxians $20.
DISKS: Bank Street Writer $40, File It 2 $40.
CASSETTES: Statistics $10, Touch Typing $10.

Sell separately, or the lot for $1000. Contact David Kingston on (02) 918-3600 after 6 P.M. (Avalon Beach, N.S.W.)

*****

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Indus GT Disk Drives (single and double density) -approximately $600.

I will be importing these drives direct from the States in late October. There is a limit on the number I can import so let me know if you want one and leave a $100 deposit.

These drives come with a carry case which doubles as a disk box. Also included with the Indus GT Drives are spread sheet, data base and word processor programs as well as DOS XL.

They are fully operational and come with a three month guarantee on parts and service which will be carried out by an experienced technician.

Contact Tony Lehne on (02) 95-1649 (AH) or (02) 438-4866 during working hours.

*****

Character Maker

by James Soutter. (Davidson, N.S.W.)

[EDITOR'S NOTE:- This program has some similarities to the CHARACTER PEEKER program appearing in this issue -purely by coincidence the two programs arrived at the same time. Anyone who is interested could merge the two programs to make a character editor which could recall and redefine the standard Atari characters. Neither of the programs goes beyond displaying the character data, but it would be fairly easy to write a subroutine which would save the data as part of the program. Using the Atari's 'forced read' mode (POKE 842,12 and POKE 842,13) which runs the cursor down the screen entering any displayed information. This will require a some trial and error work if you don't already understand the procedure though - a problem our members can work on!

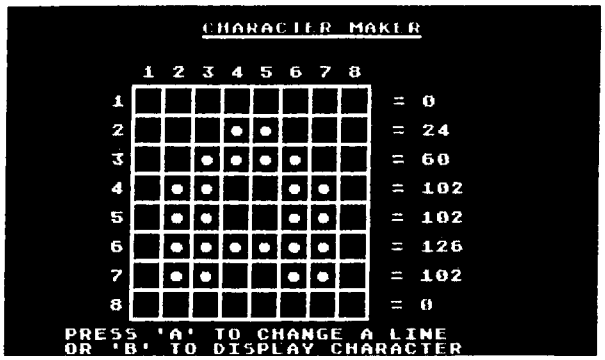
If you want a little more information on character graphics refer to Gregg Ramsey's article on page 4 of Inside Info No.5 (February 1983).]

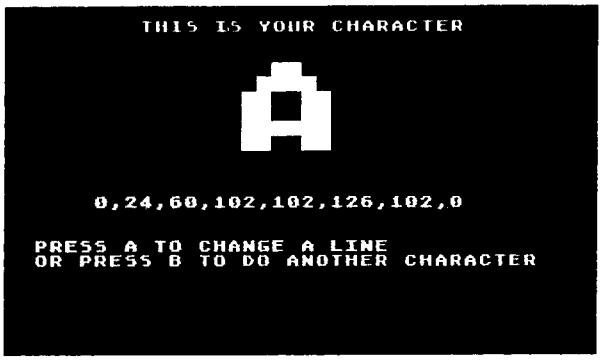
This program has two screens. On the first screen you design and edit your own character in an 8x8 grid -one line at a time. Here are the keys used:-

0 Puts a blank space in the square (bit off)
1 Puts a ball character in the square (bit on)
A 'AUTO FINISH' finishes the line in using the ball character or blank spaces, depending on the last bit keyed. Defaults to a blank.
C 'CHANGE LINE' allows you to alter a finished line.
DELETE/BACK S Moves the cursor back one square.

Once the character has had its last bit defined you are presented with two options. Press:-
A to change a line.
B to go to the second screen.

The second screen displays your character and the eight elements of data which make it up. If you aren't happy with your character you can press 'A' to modify one line of the displayed character. Alternately, if you're happy with the result, you can jot down the data elements and press 'B' to design another character.





	ATASCII Number	ATASCII Character	Necessary Keystrokes
FIRST SCREEN	CHR$(13)	▔	CTRL M
	CHR$(17)	┌	CTRL Q
	CHR$(23)	┬	CTRL W
	CHR$(5)	┐	CTRL E
	CHR$(124)	|	SHIFT =
	CHR$(1)	├	CTRL A
	CHR$(19)	┼	CTRL S
	CHR$(18)	─	CTRL R
	CHR$(4)	┤	CTRL D
	CHR$(28)	↑	ESC CTRL -
	CHR$(26)	└	CTRL Z
	CHR$(24)	┴	CTRL X
SECOND SCREEN	CHR$(3)	┘	CTRL C
	CHR$(31)	→	ESC CTRL *
	CHR$(28)	■	CTRL T
	CHR$(30)	←	ESC CTRL +

```
1 REM ########################################
2 REM #       CHARACTER MAKER          #
3 REM #       by James Soutter         #
4 REM # Published by Atari Computer    #
5 REM #    Enthusiasts (N.S.W.)        #
6 REM #         October 1984           #
7 REM ########################################
10 DIM B(8),V(8),A$(1):GRAPHICS 0:POKE
 710,4:GOSUB 660:POKE 53774,64:POKE 16
,64:REM DISABLE BREAK KEY
20 REM SET UP THE SCREEN
30 ? CHR$(125):POSITION 13,1:? "CHARAC
TER MAKER":POSITION 13,2:? "
"
40 POKE 82,7:? :? "  1 2 3 4 5 6 7 8":
? " ┌┬┬┬┬┬┬┬┐"
50 FOR I=1 TO 8:? I;"│ │ │ │ │ │ │ │
 = 0":? " ├┼┼┼┼┼┼┼┤":NEXT I:?
"  └┴┴┴┴┴┴┴┘"
60 POKE 82,2:B(0)=0:FOR I=1 TO 8:POSIT
ION 9,4+(2*I):? "←→";:FOR J=1 TO 8:GOS
UB 290
70 IF A=65 OR A=48 OR A=49 OR A=126 TH
EN 100
80 IF A=67 THEN GOTO 310
90 GOSUB 290:GOTO 70
100 IF A=48 THEN ? " ";:B(J)=0
110 IF A=49 THEN ? "■";:B(J)=1
120 IF A=126 AND J>1 THEN ? "←";:J=J-
1:GOSUB 290:GOTO 70
130 IF A=126 THEN GOSUB 290:GOTO 70
140 IF A=65 AND B(J-1)=0 THEN FOR L=J
TO 8:B(L)=0:? " ";:NEXT L:J=8
150 IF A=65 AND B(J-1)=1 THEN FOR L=J
TO 8:B(L)=1:? "■";:NEXT L:J=8
160 NEXT J:V(I)=0:IF B(8)=1 THEN V(I)=
1
170 IF B(7)=1 THEN V(I)=V(I)+2
180 IF B(6)=1 THEN V(I)=V(I)+4
190 IF B(5)=1 THEN V(I)=V(I)+8
200 IF B(4)=1 THEN V(I)=V(I)+16
210 IF B(3)=1 THEN V(I)=V(I)+32
220 IF B(2)=1 THEN V(I)=V(I)+64
230 IF B(1)=1 THEN V(I)=V(I)+128
240 POSITION 28,4+(2*I):? V(I):NEXT I
250 FL=1:POSITION 4,22:POKE 752,1:? "P
RESS 'A' TO CHANGE A LINE":? "  OR 'B'
 TO DISPLAY CHARACTER";
260 GOSUB 290:IF A<>65 AND A<>66 THEN
260
270 IF A=66 THEN 540
280 POSITION 2,22:? "

                    ";:POKE 752,0:GOTO 31
0
290 OPEN #1,4,0,"K:":GET #1,A:CLOSE #1
:RETURN
300 REM **** FIX MISTAKE ****
310 POSITION 3,23:? "WHICH LINE TO CHA
NGE?";:POKE 764,255:GOSUB 290:CL=A-48
320 IF CL<0 OR CL>8 THEN 310
330 POSITION 3,23:? "
            ";:POSITION 9,4+(CL*2):? "→
←";
340 FOR L=1 TO 8:GOSUB 290
350 IF A=65 OR A=48 OR A=49 OR A=126 T
HEN 370
360 GOSUB 290:GOTO 350
370 IF A=48 THEN ? " ";:B(L)=0
380 IF A=49 THEN ? "■";:B(L)=1
390 IF A=126 AND L>1 THEN ? "←";:L=L-
1:GOSUB 290:GOTO 350
400 IF A=126 THEN GOSUB 290:GOTO 350
410 IF A=65 AND B(L-1)=0 THEN FOR S=L
TO 8:B(S)=0:? " ";:NEXT S:L=8
420 IF A=65 AND B(L-1)=1 THEN FOR S=L
TO 8:B(S)=1:? "■";:NEXT S:L=8
430 NEXT L:V(CL)=0:IF B(8)=1 THEN V(CL
)=1
440 IF B(7)=1 THEN V(CL)=V(CL)+2
450 IF B(6)=1 THEN V(CL)=V(CL)+4
460 IF B(5)=1 THEN V(CL)=V(CL)+8
470 IF B(4)=1 THEN V(CL)=V(CL)+16
480 IF B(3)=1 THEN V(CL)=V(CL)+32
490 IF B(2)=1 THEN V(CL)=V(CL)+64
500 IF B(1)=1 THEN V(CL)=V(CL)+128
510 POSITION 28,4+(2*CL):? V(CL);"  "
:IF FL=1 THEN POSITION 23,23:? "←→";:G
OTO 250
520 IF FL=2 THEN 540
530 POSITION 9,4+(I*2):? "←→";:J=1:GOS
UB 290:GOTO 70
540 ? CHR$(125):? "       THIS IS YOUR
 CHARACTER":POKE 82,15:? :FOR I=1 TO 8
:LOOK=V(I)
550 RESTORE 730:FOR X=0 TO 7:READ Y:IF
 LOOK-Y>-1 THEN ? "■";:LOOK=LOOK-Y:GOT
O 570
560 ? " ";
570 NEXT X:? " ":NEXT I:POKE 82,2:? :?
 :? "    ";:FOR I=1 TO 8:? V(I);",";:N
EXT I:? "← "
580 ? :? :? "PRESS A TO CHANGE A LINE"
:? "OR PRESS B TO DO ANOTHER CHARACTER
"
590 GOSUB 290:IF A<>65 AND A<>66 THEN
GOTO 590
600 IF A=66 THEN RUN
610 POSITION 7,20:? " 1 2 3 4 5 6 7 8"
:POSITION 7,21:? "┌┬┬┬┬┬┬┬┐":P
OSITION 7,22:? "│ │ │ │ │ │ │ │"
620 POSITION 7,23:? "└┴┴┴┴┴┴┴┘
";
630 POSITION 2,16:? "WHICH LINE TO CHA
NGE?    ":? "
            ":POSITION 24,16:? "→←";
640 GOSUB 290:CL=A-48:IF CL<1 OR CL>8
THEN 640
650 ? CL:POSITION 15,2+CL:? "        "
:POKE 752,0:POSITION 8,22:? "→←";:FL=2
:GOSUB 340
660 POKE 82,0:? CHR$(125):? "   CHARAC
TER WRITER by James Soutter":? "
"
670 ? "  In this program you design an
d edit   your own character in an 8x8
grid then"
680 ? "see the character and all the d
ata to   make it in another screen. He
re are the  keys used......."
690 ? :? "0 Puts a ' ' in the square (
bit off)":? :? "1 Puts a '■' in the sq
uare (bit on)":?
700 ? "A 'AUTO FINISH' finishes the li
ne in '■'  or ' ' depending on the las
t bit keyed  Defults to ' '.":?
710 ? "C 'CHANGE LINE'":? :? "DELETE/B
ACK S Moves the cursor back one   squa
re."
720 ? :? :? "       Press any key to c
ontinue.";:GOSUB 290:RETURN
730 DATA 128,64,32,16,8,4,2,1
```

●●●

Oops and Sods

You'll notice a lot of information from Futuretronics has been printed in this column. This is because Futuretronics has chosen A.C.E. (N.S.W.) as the official user's group in N.S.W. Gaining tangible support from Futuretronics has been a long time coming but it's very welcome now that it's finally arrived. At present, we are still negotiating with Futuretronics about how this will work and should know the outcome in the not too distant future.

I guess that this great move is due, at least in part, to the appointment of Richard Duldig as National Marketing Manager and Greg Every as Public Relations Manager. These executives can be contacted on (03) 579-2011.

HIDDEN SECRETS IN ATARI GAMES

Ken Shiu advises:- For owners of Preppie! and Preppie!2, press these key combinations (before the start of each game) for interesting results:-

[SHIFT-CONTROL-M] = TOGGLE MUSIC ON/OFF
[SHIFT-CONTROL-ATARI] = SECRET START LEVEL
[SHIFT-CONTROL-INSERT] = TOGGLE BETWEEN 3 OR 5 LIVES

EXPANDING THE XL COMPUTERS

In the States Atari has given a demonstration of a 128k expansion module for the XL machines. The unit was a prototype which is still being developed. It is not yet known when it will be available or how much it will cost.

The 600 XL comes with only 16k of RAM which can be expanded by plugging a memory expansion module into the back. RC Systems (121 W. Winesap Road, Bothell, WA 98012. U.S.A. Ph.(206) 771-6883) has released three modules:-

AM64 (64k).....$US119.95
AM1 (48k).....$US 99.95
AM2 (32k).....$US 79.95

These units extend only 20mm from the body of the computer, are automatically recognized by BASIC and other programs, are fully compatible with all cassette, disk or cartridge software and carry a limited 90 day warranty.

Apparently only the AM64 is compatible with the Atari translator disk.

NEW ATARI HARDWARE

1090 CP/M MODULE: There have been many rumours about the proposed CP/M option being scrapped by Atari and left for third party software manufacturers to produce. Futuretronics advises that the CP/M modules will be available in Australia some time after Christmas. Apparently they are in the same colours as the XL series computers and peripherals but I don't know whether they are actually manufactured by Atari or not.

There will also be the new Atari Light Pens and a dot matrix printer -the Atari 1025. Rumour also has it that the 1450XL computer will be released but with a different name.

On top of this Jack Tramiel has stated:- "I will present to the world, the new Atari corporation; a corporation that through its new corporate image, and expanded product offerings, will give the retail markets of the world 8, 16 and 32 bit micro computers all at affordable RRP's."

Atari's marketing vice president has stated that "The new Atari Corporation will position itself as a full line manufacturer of quality products in the video game, family computer and small business computer categories.

While we in Australia are being fed all this great news, the latest Eugene A.C.E. newsletter is spelling out DOOM. Obviously a lot of user support has been dropped in the States and they are feeling it -they feel they are now one their own and need to band together for help and repairs. Meanwhile Mr Tramiel has been assuring everyone of a continuing line of compatible Atari products. I hope Eugene A.C.E. doesn't know something that we don't!!!

NEW ATARI SOFTWARE

Sometime before Christmas we will be seeing plenty of new software for the Atari. This will be from Atari Inc. as well as third party software manufacturers. Advice from Futuretronics is that this new line up of software will be really top quality stuff and will be much more competitively priced than in the past. In the new range of software we can expect to see:-

* Educational programs from Fisher-Price who are working with Spinnaker software. These are aimed at children 3-8 years and 8-12 years.
* Educational software from Spinaker, a company that holds 40% of the U.S. educational s/w market. These will include Windham Classics -a series of children's classic stories.
* New home management programs developed by Synapse. These are SynFile -a straightforward filing system, SynTrend -a two part graphics (SynGraph) and statistical (SynStat) package and SynCalc -a spreadsheet. SynCalc and SynFile are both compatible with AtariWriter.
* Electronic Arts software for around $60. For some reason Electronic Arts won't allow their software to be sold via mail order in the States.
* There will be 17 new Activision titles with cassette and disk based programs being priced at under $29 and under $35 respectively. Activision is also developing some software called "Ghostbusters" based on the film by Columbia Pictures. This will be available for Christmas and is expected to be a mixture of adventure, strategy and action based on the events of the film. The player will be the Ghostbuster.

For some time Commodore has had a range of cheaply priced software. Futuretronics has announced that, in the last quarter of this year, they will have a range of about 15 cassette based programs for around $13. This will be aimed mainly at education but will cover other fields as well.

Futuretronics is also looking at importing a range of good British software -this is something we hear very little of here in Australia.

Any time now, Futuretronics will be bringing in public domain software from the States. The only delay is that they are currently looking into the legal aspects of doing this.

PRICE DROPS

There are several price reductions mentioned in the NOTICES in this issue. Here are some other reductions in Recommended Retail Prices:- Atari/AtariSoft cartridges $39.95 (includes Joust, Pole Position, Ms PacMan, Space Invaders, Defender). Remote control joysticks $59.95 a pair.

Atari Program X'change CLOSES

With the huge changes made by Jack Tramiel at Atari, APX has been scrapped. The program line up they once sold has been reduced to 25 programs (I don't know which ones) and is now available through:- Atari Customer Relations. 1312 Crossman Avenue, PO Box 61657, Sunnyvale, CA. 94088. U.S.A.

12 MONTH WARRANTY ON ATARI XL COMPUTERS

All Atari XL Computers purchased on and from the first of May 1984 are covered by a 12 month guarantee. It was made possible because of the good reliability of the products -apparently they only have a one percent failure rate. This guarantee also covers computers sold to schools.

All goods sent to Futuretronics for repair will be sent to Victoria for repair unless the required repair is very simple. The reason? -their head office has all the necessary specialized equipment for finding and analyzing faults. Futuretronics claims that they should be able to maintain a turnover period of around two weeks on repairs using this system. I hope it works -they laid off most of their repairmen in Sydney.

For a bit of comic relief, here is an excerpt from "The Australian Commodore Review" (May, 1984):-

"In the current edition of the Guiness Book of Records there is a singular omission. Although I know it is not the role of a humble rat to correct a publishing company with the magnificent name of "Guiness Superlatives", yet I feel I must.

I have carefully checked the latest edition under the section "man-made structures". Nowhere do I see any reference to the pile of machines awaiting service at Commodore Australia. Surely this is the largest man-made edifice in the world. It is bigger than the Aswan Dam, it dwarfs the Great Pyramid of Giza, it towers over the Great Colossus of Rhodes, it covers a wider area than the Rockerfeller Centre.

Then why is it not listed as the greatest man-made edifice in the world? I am puzzled at the omission."

AUSTRALIAN ATARI HOTLINE

Futuretronics is looking at setting up a hot line for us troubled Atari users. This telephone hot line will be based in Melbourne, Victoria but don't despair -your STD phone bill shouldn't rise too much! At this stage it is expected that the hot line will have a toll free number (008 prefix). As of this writing I don't know when it will be starting operations -I'll keep you posted.

ATARI ADVERTISING CAMPAIGN

Futuretronics advised that there will be a major advertising campaign for the Atari Computers during December in the lead up to Christmas. This campaign will be handled by the newly appointed McCann-Erickson company who have handled many large, successful advertising campaigns. Advertising for the Atari Video Games machines will be left in the hands of Concord Advertising and Marketing.

Several people mentioned to me that it was a pity, that while "The Second Australian Personal Computer Show" was running in Sydney, the only TV advertising we saw was for the video games machine. Atari still has problems convincing people that their range of personal computers are not just games machines -this advertising just added to the confusion.

Your Computer Slips-up

The August issue of Your Computer contained a review of the Atari 800XL. Unfortunately many of the comments were outright wrong. A lot of people have been writing letters of complaint since -I hope it leads to a retraction (OOPS!).

NEW VIDEO GAMES MACHINE

It's something of a surprise, but there will be new games machines released. The VCS 2600 Pro System (marketed as the Atari 7800 in the States) combines the best of the old 2600s and the 5200s (never released here) and accepts all the old 2600 games cartridges.

BAD RETAILER SERVICE?

Futuretronics has advised that if you have any reason to complain about the service you get from your Atari retailer, you should contact them. They said that they and the retailers spend a lot of money training retail staff. If this is not working, they want to know!

THE LAST STARFIGHTER

I saw a report on this movie on TV one morning. Due out in Australia for Christmas, it's special effects are entirely computer generated but the picture is far closer to reality than the effects used in TRON. The computer used for the effects was capable of one billion computations a second and enabled the movie to be completed in record time at a cost of $US3 million -a third the cost of an equivalent movie. From what I saw, the movie will be well worth seeing and a lot easier on the eyes than was TRON.

VIDEO COMPUTER COURSES

Phillip M Nathan, Marketing Director of "Understanding Personal Computers" has advised that he has a range of instructional tapes which run 20-30 minutes each on VHS Beta or Umatic for $79 each. At the time he gave me the information there were six titles available:-
Personal Computing, Computer Hardware, Computer Software, Printers, Word Processing and Starting Out Right. There were also another six titles to be released. For further information contact Phillip on (02)337-4207 or write to Suite 201, 2nd floor, Edgecliff Centre, 203-233 New South Head Road, Edgecliff. 2027.

EYE GAZE COMMUNICATOR

A recent news report on TV showed an Adelaide (South Australia) invention called the Eye Gaze Communicator -an alternative form of computer input. The users' head is held in place whilst the EGC shines a light into their eyes. This light is reflected onto the VDU screen, from the eye, to select options which are displayed on the screen.

The program has 24 pages (screens), each consisting of 72 characters, words or phrases which

are selected by focussing on that character for a short period of time. This "interface" was developed for the handicapped who cannot use keyboards and other forms of computer input. To date, experiments have revealed that a user can "type" at 45 words per minute and that it is a perfect interface which won't cause any eyestrain since it uses normal eye movements. OH, my aching fingers!!

SOME GOOD SPECIALS IN THE U.S.

If you are already a registered owner of LJK's Data Perfect you can get some good deals on LJK's other products if you contact them before January 1st, 1985. Data Perfect update (version 2.02) $US30, Letter Perfect (version 6) $US50 and Spell Perfect $US50. You can get the two latter programs together for $US90. All of these programs have updated documentation which is really EXCELLENT! Send to:-

LJK Inc. 7852 Big Bend Boulevard,
St. Louis, Missouri. 63119. U.S.A.

You can also get any of the Tricky Tutorial series from Educational Software at 50% of the normal cost. Write to:-

Educational Software. 4565 Cherryvale,
Soquel. CA. 95073 U.S.A.

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Voice Synchronization

by Peter Dickeson. (Denistone, N.S.W.)

[EDITOR'S NOTE:- Originally, an article by Peter Tucker on adding audio to your programs was printed in Inside Info No.13 (June 1984). Peter Dickeson has looked at refining things a little more. In the next Inside Info I hope to print an article on a hardware modification that will do an expert job of synchronizing your voice or sound track on the Atari program recorder.]

RECAP

1) Program data (digital information) is stored on the tapes right channel while sound is put on the left channel of the Atari program recorder (which is stereo).

2) Sound feedback through the TV speaker may be suppressed by POKEing location 65 with 0 (zero) before typing in CLOAD or ENTER "C:".

3) The serial port status, location 53775 ($D20F), monitors input from the cassettes right channel.

4) The left channel is free for voice, music, noise, etc.

5) The Atari program recorder erases both channels as it records (or SAVEs) data and programs.

6) Cassette motor control uses the port A controller (PACTL), location 54018 ($D302). POKE with 52 to turn the motor on, or with 60 to turn the motor off.

A NEW METHOD

A professional program I have used makes use of voice synchronization. From this I have developed a short test program which goes like this:-

```
 10 COUNT=0:COMP=0
 20 IF PEEK(54018)=52 THEN 50
 30 POKE 54018,52:POKE 20,0
 40 IF PEEK(20)<25 THEN 40
 50 I=PEEK(53775)/32:I=INT(0.5+I)-INT(I)
 60 ? PEEK(53775)
 70 IF I=COMP THEN COUNT=COUNT+1:COMP=1-COMP
 80 IF COUNT<>3 THEN 20
 90 POKE 54018,60
 100 FOR J=1 TO 900:NEXT J:GOTO 10
```

Line 40 pauses for half a second because memory location 20 is incremented every 1/50th second.
Line 50 makes I equal to 1 or 0. The object is to make I flip flop when the voice stops.
Line 70 & 80 test for changes in the right channel.

Typical values of 53775 are 109 and 111 when the voice can be heard through the TV speaker. The flip flop value of 53775 is 127 and is only momentary. It is also the value of 53775 when the motor is off.

The problem is how to put a sound in the right channel which gives a value of 111, while speaking on the left channel, followed by a value of 127 for a very short period of about a quarter of a second. Surprise! Surprise! The high pitched sound heard just before the beeeep of a CLOAD will give a value of 127 or close to it, I think!! A lower pitch is required for a value of 111.

Well, it looks like I have created more problems than I have solved. Anybody like to help?

BOOK REVIEW

32 BASIC PROGRAMS for the ATARI computer.
Put out by A.N.I Books for dp dilithium Press.
Review by Barry Williams. (Frenchs Forrest, N.S.W.)

This book contains 32 programs suited for all Atari computers. A major feature of the book is that it comes with a tag which can be mailed (along with $US19.95) to obtain the 32 programs on disk.

At $A29.95 this book is well worth the price for education alone. It contains 283 pages and has programs in it for everyone -applications, educational, games, graphics, mathematics as well as other miscellaneous programs.

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QUESTIONS AND ANSWERS

EDITOR'S NOTE: In Inside Info No.12 (April, 1984) there were some questions asked which were never fully answered. Those questions have been reprinted here along with other, more recently received questions.

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QUESTION: Our Atari Computer Club (Auckland, New Zealand) has recently formed a Word Processing special interest group. We have all had problems with segments of our text being repeated when our letters, documents, etc. are printed out. The printer will stop momentarily, then it reprints about 37 characters and the next line is printed from zero left margin, ignoring the program's set left margin.

We think that it may be an Operating System bug which causes the print buffer (which is 40 characters long) to be repeated. Would a 'Revision B' ROM solve the problem?

S.A. Rumsey. (Auckland, New Zealand.)

ANSWER: The only way to solve this problem is to get the Revision B ROM chips and replace the original chips on your Operating System board.

The Revision B ROM chips have never been brought into Australia except as part of the new XL machines. The only way to get this upgrade (as far as I know) is to purchase a hardware modification called SuperMon. A review of this piece of hardware (and how to get it) has been included in this issue of Inside Info.

*****

QUESTION: I am interested in the MOSAIC 64K RAM Select memory board. I understand that it allows an extra 16K of memory in the form of 'switchable' 4K blocks. I specifically wanted to know how the blocks are switched and if they can be utilized in using ATARIWRITER. As I mentioned in INSIDE INFO No.11, ATARIWRITER sometimes runs out of memory when you use its 'print preview' option, especially in the double column format used for Inside Info. This makes it impossible to preview one whole page. Has anyone out there got the 64K RAM Select board and if so could I please have a demo?

C. Fitzgerald. (Clyde, N.S.W.)

ANSWER: One of our members, Joe Delman, rang me about this and advised that he had purchased one of these about 18 months ago for $300 from Computerwave.

It is not possible to use this memory expansion in conjunction with AtariWriter. The MOSAIC 64K RAM Select memory board requires the user to POKE a few memory locations so that the computer will recognise the extra available memory. Obviously, when the computer is fully under program control these POKEs can't be done.

*****

QUESTION: Could you please tell me the PEEK location for the HELP key on the Atari XL machines? I have the details for the other console keys (bought a copy of Poole: Your Atari Computer) but not that one as it's not on the older 400/800 machines.

B. Fairhall. (Blaney Public School)

ANSWER: My thanks to Greg Every at Futuretronics in Melbourne. Not knowing the answer to this, I wrote to him for help and received his reply within the week.

The memory location for this key is called HELPFG (help flag) and is at decimal location 732 ($02DC). This location is automatically zeroed on power-up, but after reading this location and deciding what to do, you must clear it by POKEing it with zero (POKE 732,0).

You can read (PEEK) HELPFG for the following values:-

17 indicates HELP key only was pressed.
81 SHIFT-HELP keys pressed in combination.
145 CTRL-HELP keys pressed in combination.

PAGE 6 magazine (England) also mentioned the following (decimal) XL computer memory locations:-

729 Key repeat delay. Alters the time before a key repeats. POKE with 0-255 to represent multiples of a jiffy (1/50th of a second) before the key repeats.

730 Key repeat rate. Similar to 729 except that it controls the rate of repeat after the initial delay.

731 Key click. POKE with 255 to disable sound through the TV. POKE with 0 to enable.

621 Keyboard. POKE with 255 to disable the keyboard or with 0 to enable.

622 Text scroll. POKE with 255 followed by GR.0 to fine scroll text. POKE with 0 to return to normal.

*****

QUESTION: Recently I purchased an Atari 'trak-Ball Controller' and I'm very pleased with it. When it comes to playing Missile Command it is the greatest thing since the introduction of the Atari Home Computer range.

I was thinking of making full use of its 360 degree movement by designing my own programs to accomodate this free motion. I typed in a two line program to get a print-out of the STICK(0) values and found that they were in no apparent order or sequence.

I realize that the Trak-Ball is fairly new on the market but if anyone could give me any information on its use it would be greatly appreciated.

G. Ashworth. (Mt. Riverview, N.S.W.)

ANSWER: An article on using the Trak-ball was printed on page 57 of the Spring 1984 edition of "The Atari Connection". Greg Every (Futuretronics Public Relations Manager) has given our club permission to reproduce this article. Hopefully I will be able to include it in the December issue of Inside Info.

*****

810 Disk Drive Modifications

Compiled by Peter Bamford. (Umina, N.S.W.)

[EDITOR'S NOTE:- While Peter has actually carried out and used these these modifications, the club cannot take any responsibility for damage resulting from attempting to carry them out. These modifications should not be attempted if you are not familiar with using a soldering iron as damage to the components could occur. Be especially careful not to apply too much heat to circuit boards or components.

810 FIX

Having trouble writing to or formatting some disks? My 810 wouldn't format disks which were previously formatted in double density or that I'd received from friends.

This tip came from the Jersey Atari Computer Society Newsletter in an article by Bob Mutton.

If the resistor marked R218 on the board on top of the drive (analog board) above the diskhead is a 2000 ohm resistor (marked red, black, red, gold) then change to a 1400 ohm resistor. Alternatively, a 4700 ohm resistor can be soldered in parallel to give the same result.

This apparently improves the strength of writing on the 810. It worked for me with no problems or side effects.

Write Protect Override

This mod allows use of the second side of a disk without punching a write protect notch.

The following is reproduced from the Queensland Atari Resources Club Newsletter, article by Bill Fletcher.

Parts needed are as follows:-

1 X 1800 ohm resistor
1 x 270 ohm resistor
1 x LED (red, green or yellow)
1 x D.P.D.T. switch

A flashing LED could be substituted for a normal LED.

The actual schematic circuit diagram of the modification is set out below. Reference to the diagram will reveal that the modification is only connected to the drives original circuitry at two points.

The position of the switch and LED is your own choice. I suggest you place them on the front face for ease of use. Take care when selecting a position so as not to tamper with the drive mechanism, door, circuit board, etc. On my drive I placed the LED on the right hand side of the door in line with the BUSY LED -the switch was placed under the door and to the left of the door catch (a hole was placed there during manufacture, for mounting a BUSY LED. e.g. Apple disk drives).

The polarity of the connection of the LED is very important -an LED will light up in one direction only. Also insulate any exposed wire so as they don't touch other parts of the drive.

The J101 plug is located on the board on the left side at the back of the drive. At the bottom of plug is pin 1, the top is pin 5. Add the wires to the outer side of the side board.

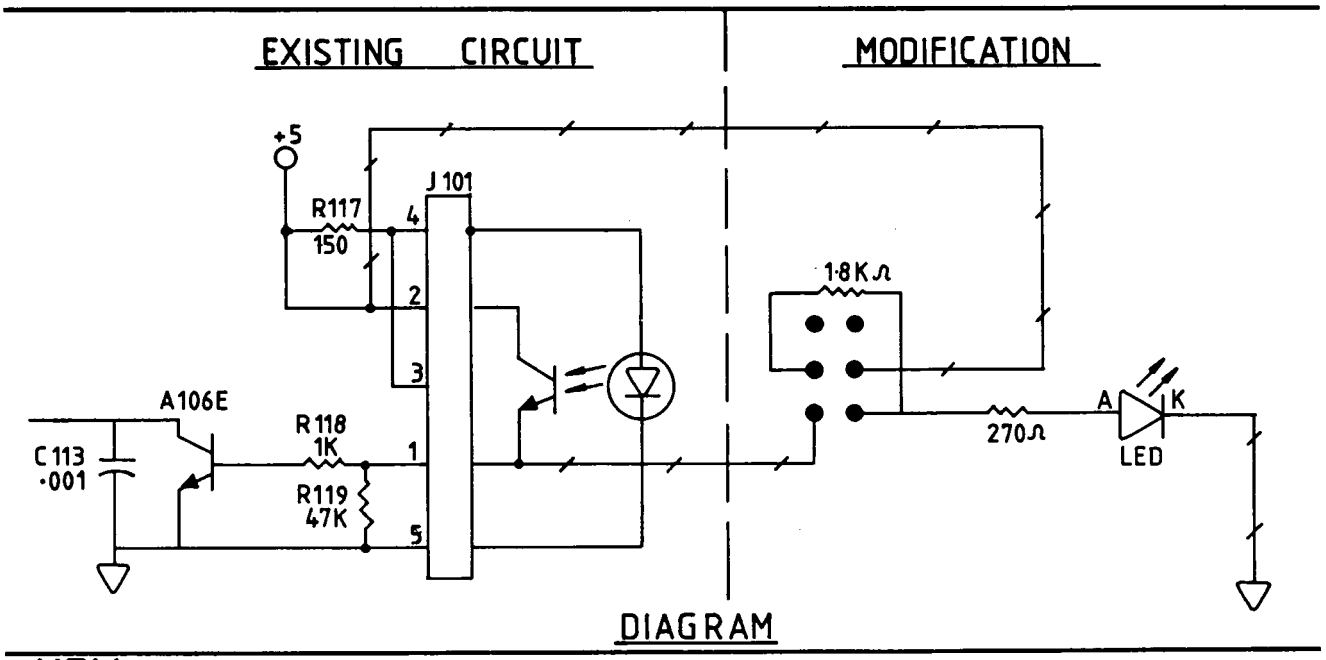
NOTE: I mounted my switch at the back of the drive with the LED in the hole under the drive door.

This mod has also worked perfectly with no problems or side effects.

[EDITOR'S NOTE:- The Dick Smith catalogue contains a DATA SECTION which contains help on resistors and Light Emitting Diodes. You may have trouble getting 1400 ohm resistors. Here are the first four colours of the colour coding on the resistors:-

270 ohm Red, Purple, Black, Black.
1400 ohm Brown, Yellow, Black, Brown.
1800 ohm Brown, Grey, Black, Brown.
4700 ohm Yellow, Purple, Black, Brown.

Resistors cost 7 cents each, LEDs are 20-30 cent each. DPDT=Double Pole, Double Throw.]



Why Pirates?

by Stephen Lewis (Reprinted from Computerise Utah VOL.3 Issue 1)

I have done an informal study of the opinions of software pirates and legitimate users on the prices of programs. The general consensus of almost all home computer users has been the same. The price placed on recreational programs should not be more than $US20 regardless of the media (disk, cartridge or cassette). The mean price should be the same as an LP record ($US7 to $US15).

There seems to be more effort and resources required to get a song to market than a program. With a song the lyrics must be written, the music composed, an artist found to sing it, musicians to play it, a studio to record it and a producer to distribute it. At each step, either a percentage or fee is paid for the service, which is reflected in the final price.

With software, an author submits a program to a distributor who adds the copy protection, makes copies, packages it and markets it. Many fewer people need to be paid or take a percentage.

A software manufacturer has a big group of software routines and macros which can be mixed like a cookie recipe to produce new programs. You may have noticed this when the game play is the same but the graphics are different. In some cases you can sit down to a game that you have never seen before and in a few minutes can guess the manufacturer without ever seeing the credits.

I have talked to (pirates?) who have a collection of over one hundred diskettes, close to one thousand programs and purchased less than ten programs. I asked why they had not bought more of the programs and they told me that they can't afford to spend $US40 to $US100 a month on games. I asked them how much they could afford and they said about $US100. On asking how they got into collecting copyrighted programs, I got pretty much the same answer from all of them. When they first got their computers they bought the programs, but three things turned them to piracy:-

1 Cost By the time they bought their computer, a disk drive, a printer and a modem, they didn't have any money left. In many cases, they would be making payments on them for the next few years.

2 Access They met other people who were willing to let them have copies of programs.

3 Experience After spending a lot of money on programs which either wouldn't work or would not perform as expected or promised, they resolved not to be taken again and will not buy another program until they could thoroughly check it out. You can't spend that much time in a store, so the only way to do it is to get a copy and check it out at home.

Several pirates look on themselves as Robin Hoods, helping the less fortunate and really not hurting the rich because many of the people they give programs to, wouldn't buy the programs anyway because of the cost.

I don't claim to know the solution to the piracy problem but it seems to me, from some of my discussions with pirates, that the fuel that keeps piracy going is high software prices.

The software marketing to home computer users seems to me to be more akin to movies and records than marketing software to business. I think that making an author of a good program a celebrity along with lower prices would do more for software sales than complicated copy protection schemes.

[EDITOR'S NOTE (EDITORIAL??):- My main reason for printing this article is that David Glenmyre of Futuretronics mentioned that he was aware of software piracy within the Club and that software copyright laws are now the same as for books. One area that is not covered by this article is the issue of back-up copies. Personally, I have had two or three disks, for some reason, become unreadable by the disk drive. But that I had "The Chip" to make back-ups, I'd have had to go without the program, or else pay out the full price to replace it.

Only a few software companies have done anything about providing the purchaser with back-ups at minimal cost (e.g. Adventure International). LJK, who market Letter Perfect, Data Perfect and Spell Perfect don't even bother to protect their disks. In fact, they recognise the need for back-ups and give instructions on how to back-up their disks -they've saved money on fancy software protection techniques and don't seem to have suffered at the hands of piracy. Frankly, I don't know if making back-ups is considered piracy but if it's not being done for profit or to swap I can't see any problems. Surely, for the price a user pays, they are entitled to some form of insurance. Most peripherals and software are only covered for 1-3 months, yet appliances and electrical goods which cost the same amount would be covered for at least one year!!

Probably the one major reason that it became worthwhile for people to start pirating was that when software first became available for the Atari there were some pretty shoddy programs at unrealisticly high prices. Fortunately, the standard has definitely improved so that today we've got some great stuff (if only I could get time to use it) but now the good companies suffer too. Possibly in the future we'll see really cheap software, cheap enough to defeat any pirate's purpose.

Remembering that this article was written in America, where just about everything for computers cost about half what we pay (up 'til very, very recently), I think that we have more reason to gripe. There have obviously been some incredibly high profit margins. One example is my Epson printer which cost $1250 eighteen months ago (no, your eyes are OK!). Computerland wanted to charge me $1450 for it, but once Epson cut out the distributor and moved into Australia themselves, the price dropped to $950 -more than a little hard to stomach!

For sure we Aussies have been getting a pretty raw deal, with large profit margins and high import duties -it's really good to see these things changing and prices dropping so that we'll no longer be kept in the poor-house because of our hobby. Hopefully, all that is left for us to do is to get the sour tastes out of our mouths.]

Character Peeker

by Bruce Fairhall. (Blaney Public School, N.S.W.)

[EDITOR'S NOTE:- This is our first contribution from one of our member schools.

This is a tutorial program which PEEKs at the standard Atari character set, which is ROM based, and displays the ATASCII No., the actual character, the eight bytes which make up the character and the eight bits which make up each byte of the character.

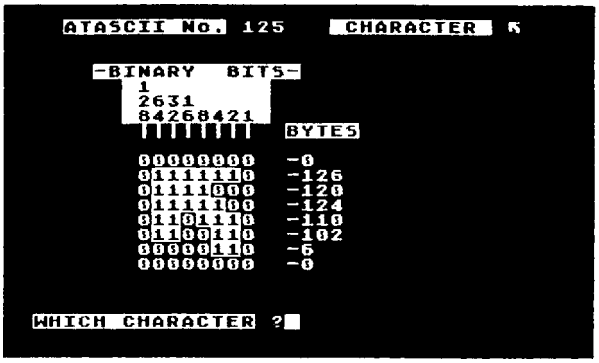
Basically, every character is made up of a grid of 64 bits (8X8). If a bit is ON it is equal to one. If a bit is OFF it is equal to zero. This of course is binary number structure, the language the computer doesn't have to interpret.

The program shows the 8X8 grid and every bit which appears within the character. To make the actual character stand out within the grid I have displayed the bits which are ON as inverse ones (1s).

Above the grid is a block headed "BINARY BITS". The values in this block are read vertically and indicate the value of each bit in that column. Hence we get the standard binary bit values 128, 64, 32, 16, 8, 4, 2, 1.

To the right of the grid is displayed the total of the bits -in other words the value of each of the eight bytes which combine to form the character.

To use the program simply enter the character you wish to examine and everything will be displayed.



Example: The diagram shows ATASCII character number 125 [CHR$(125)] which is the character which clears the screen when printed normally. The keystrokes to actually get this character on the screen are:-

ESC then SHIFT-CLEAR

The more unusual keystrokes you will need in typing this program are as follows:-

ATASCII Number	ATASCII Character	Necessary Keystrokes
CHR$(160)		INVERSE SPACE
CHR$(124)	|	SHIFT =
CHR$(132)		INVERSE CTRL A
CHR$(147)		INVERSE CTRL S
CHR$(129)		INVERSE CTRL A
CHR$(149)		INVERSE CTRL U

```
1 REM ######################################
2 REM #       CHARACTER PEEKER             #
3 REM #     by Bruce Fairhall              #
4 REM # Published by Atari Computer        #
5 REM #    Enthusiasts (N.S.W.)            #
6 REM #         October 1984               #
7 REM ######################################
10 ? "":GOSUB 230
20 POKE 709,255:POKE 710,196:POKE 712,
200:POKE 752,1:REM * SET UP SCREEN
30 TRAP 30:POKE 752,0:POKE 764,255:POS
ITION 2,21:? "WHICH CHARACTER
 "
40 POSITION 18,21:INPUT IN$:N=ASC(IN$)
:IF IN$="" THEN N=155
50 FLAG=0:IF N)127 THEN FLAG=1
60 POKE 752,1:GOSUB 160:? CHR$(125):?
"ATASCII No. ";N;
70 IF N=155 THEN ? :? :? "RETURN -NO C
HARACTER PRINTED":GOTO 30
80 ? "   CHARACTER ";CHR$(27);CHR$(N
):? :? :? "  -BINARY BITS-"
90 ? "     1         ":? "    2631
":? "    84268421 ":? "    ||||||||
 BYTES"
100 ? :FOR I=0 TO 7:BYTE=PEEK(CHLOC+I)
:IF N)127 THEN BYTE=255-BYTE:REM FOR I
N
110 K=BYTE:RESTORE 340:? "    ";:FOR
Z=0 TO 7:READ Y:IF K)=Y THEN ? "1";:K=
K-Y:GOTO 130
120 ? "0";
130 NEXT Z:? "  -";BYTE:NEXT I
140 GOTO 30
150 REM FIND CHARACTERS IN MEMORY
160 IF FLAG THEN N=N-128
170 IF N)=0 AND N(32 THEN CHLOC=(PEEK(
756)*256)+512+8*N
180 IF N)=32 AND N(96 THEN CHLOC=(PEEK
(756)*256)+8*(N-32)
190 IF N)=96 AND N(128 THEN CHLOC=(PEE
K(756)*256)+8*N
200 IF FLAG THEN N=N+128
210 RETURN
220 REM INSTRUCTIONS
230 DIM IN$(1):POKE 709,255:POKE 710,1
50:POKE 712,150:POKE 82,4
240 POKE 752,1:POSITION 4,0:? "  ROM
CHARACTER EXPLORATION  ":? "
                          "
250 ? "               -by Bruce Fairhall
":? "
":?
260 ? "This program peeks at the Atari
 ":? "ROM and displays, for any of the
"
270 ? "256 standard Atari characters:-
":? :? "* the ATASCII number,":? "* th
e character as usually shown,"
280 ? "* the binary bits which make":?
 "up the shape of the character,"
290 ? "* the decimal value of each of"
:? "the 8 bytes that comprise":? "that
 character in memory.":?
300 ? "           .........":? :? "Aft
er each  printout, enter any":? "chara
cter to display the next"
310 ? "character.":? :? "   Now press
any key to start ";:POKE 764,255
320 IF PEEK(764)=255 THEN 320
330 ? "":RETURN
340 DATA 128,64,32,16,8,4,2,1
```

OOPS!

INSIDE INFO #12

ODDS & SODS Page 18

Mention was made of mail ordering from Atari Program Exchange in the States. With Jack Tramiel taking over Atari, APX has been scrapped. Apparently only 25 APX programs are to be retained and they will now be available from:-

Atari Inc.
Customer Relations.
1312 Crossman Road,
PO Box 61657
Sunnyvale. California. 94086.
U.S.A.

INSIDE INFO #13

ADD AUDIO TO YOUR PROGRAMS Page 4

The diagram showing the different tracks on a cassette tape had an error in it. Side B of the tape had the AUDIO and DIGITAL tracks reversed. The correct sequence is:-

RIGHT TRACK is DIGITAL.
LEFT TRACK is AUDIO.

THE MILLIONAIRE Page 13

The table depicting the necessary keystrokes to obtain the special graphics characters contained an error. The correct keystrokes to obtain the vertical line [CHR$(124)] are 'SHIFT =' not 'CTRL V' as shown.

INSIDE INFO #14

OVERSEAS MAIL-ORDERING Page 6

In Question 7 the National Australia Bank stated that you can make your MasterCard payment at ANY bank displaying the MasterCard symbol -this is not the case. What was actually meant was any National Australia Bank Branch. Banks only accept payments on the cards which they have issued.

GRAPHS 2 Page 17

There was some confusion on my part about the title of this program because there were actually two versions. The mention of GRAPHS4 should actually have been GRAPHS2.

THAT'S ALL

Hopefully that's all!!!!! Sorry for any inconvenience that may have been caused.

Make Your Vote Count!!!

MAGAZINE ARTICLES ISSUE No.7 to No.12

Compiled by Peter Bamford. (Umina, N.S.W.)

No.7 (JUNE 1983)

1) FINE SCROLLING - Article and demo
2) BLOCK MOVES USING STRINGS
3) GETTING STARTED WITH TEAM ATARI fig-FORTH
4) ODDS AND SODS

No.8 (AUGUST 1983)

5) MENU - A Menu Program
6) CATALOGUE - A database type program
7) COMPUTER GRAPHICS - An article on graphics
8) ATARI DIGITAL CLOCK - program
9) SECRETS IN ATARI GAMES - Miner 2049'er
10) GRAPHICS IN TEAM ATARI FORTH
11) SUMS - Maths program
12) ODDS AND SODS

No.9 (OCTOBER 1983)

13) POLYGON PLOTTER - Shape drawing program
14) ELECTRONIC POKER - Program
15) ATARI DOODLER - Graphics 0 drawing program
16) ODDS AND SODS
17) FILES AND SORTS - Article
18) ALL ABOUT TEXT WINDOWS - Article
19) STRETCH YOUR DISPLAY - Article and program
20) CREATE INSTANT DIRECTORIES - Program
21) BULLETIN BOARD REPORT
22) MULTICOLOUR GTIA DEMO

No.10 (DECEMBER 1983)

23) PROGRAM SELECTOR - Program
24) ARITHMETIC PROGRAMS
25) CASSETTE RECORDER PROBLEMS - Article
26) SPRITE MAKER - Forth
27) OVERSEAS MAIL ORDERING - Article
28) BASICS OF ASSEMBLY LANGUAGE - Article

No.11 (FEBRUARY 1984)

29) DISKUSSION - Article
30) GRAPHS - Graph drawing programs
31) ODDS AND SODS
32) MODEMS - Article
33) A PROGRAM LINE EDITOR
34) HARDWARE MODIFICATIONS
35) PROBLEMS WITH ATARIWRITER

No.12 (APRIL 1984)

36) A) C) E) BULLETIN BOARD/MODEMS - Article
37) MODEMS - Article
38) A TERMINAL PROGRAM
39) EXPLORING BULLETIN BOARDS - Article
40) QUESTIONS AND ANSWERS
41) HARDWARE REVIEW - Koala pad
42) DISKUSSION
43) HARDWARE REVIEW - Cicada 300
44) BASICS OF ASSEMBLY LANGUAGE (PART 2)
45) ODDS AND SODS

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Number _____

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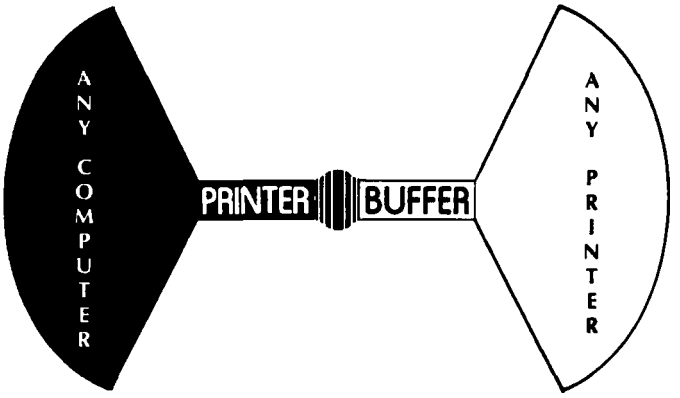

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